

Attorney Docket No. 00163.1406US01
Serial No. 09/676,620

II. Claim Rejection Under 35 U.S.C. §102(b).

The Office Action of record rejects claim 18 under 35 U.S.C. §102(b) as being anticipated by Lucas, U.S. Patent No. 4,410,442 ("Lucas"). As amended, claim 18 recites a composition that consists of "an antimicrobial component consisting essentially of heptanoic acid, and a carrier medium." Lucas, which is directed to disinfecting solutions for contact lenses, requires additional components, namely, a water soluble salt to make the solution isotonic, and a calcium chelator to prevent metal ions from fixing to the surface of contact lenses. Therefore, the amended claim is patentable over the prior art of reference.

III. Claims 1-17 and 19-37 Rejected Under 35 U.S.C. §103(a).

The Office Action rejects claims 1-17 and 19-37 under 35 U.S.C. § 103(a) as being unpatentable over the combination of the U.S. Patent No. 5,569,461 to Andrews ("Andrews"), U.S. Patent No. 5,208,257 to Kabara ("Kabara"), and U.S. Patent No. 5,234,719 to Richter et al. ("Richter"). Applicants respectfully traverse the rejection.

Andrews discloses topical compositions that include propylene glycol monoester of capric or caprylic acid, a second propylene glycol monoester or capric or caprylic acid and propylene glycol. This reference does not disclose adding a freezing point depressant.

Kabara discloses topical antimicrobial compositions that have a glycerol fatty acid ester, a first and second fatty acid antimicrobial agent selected from C_6 to C_{18} fatty acids and a carrier. This reference does not disclose adding a freezing point depressant.

Richter discloses food additive sanitizing compositions that contain an octanoic acid. The reference teaches that sanitizers that contain iodophors are not ideal because after drying, no residual activity remains on the surface, and residual activity is necessary during storage periods. Col. 3, lines 20-34. In addition, Richter teaches that many ingredients of such compositions are not food additive. Col. 3, lines 51-55.

The present invention is directed to antimicrobial compositions that comprise a C_6 - C_{12} fatty acid in the range of 0.01 to 5 wt. % and a carrier medium including a freezing point depressant component that makes up greater than 60 wt. % of the total composition.

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The Office Action combines the above-described references to show that a skilled worker would have been motivated to include the components of Richter in modifying Kabara and Andrews. However, even if such a modification was made, the combination does not read on the claimed invention. Richter teaches the possibility of using up to about 60 wt. % of a coupling agent, which may be a polyfunctional organic alcohol. See Col. 8, lines 36-50. The preferred ranges are even lower (most preferred is up to about 40 wt. %). Similarly, Kabara teaches employing an alcohol at a level of about 5 to about 60% (most preferred is up to about 25 wt. %). See Col. 8, lines 30-38. In contrast, claims 1, 17, and 19, the independent claims at issue in this rejection, all recite a freezing point depressant component that makes up greater than 60 wt. % of the total composition.

Moreover, a skilled worker would not be motivated to combine Richter with the other patents as Richter teaches that sanitizing differs from disinfecting because sanitizing requires a 5 log reduction in microorganisms, whereas disinfection requires a kill of all vegetative microorganisms- not spores. In contrast, the compositions of Andrews and Kabara are directed to disinfection and/or antiseptic use (preventing or arresting the growth of microorganisms on the living body of humans or animals). Such a difference in uses would not motivate a skilled worker to make the recited combination; and even if such a combination were to occur, that such a combination would be successful due to the differences in kill requirements as a formula having disinfection or antiseptic properties may not pass the sanitizing criteria.

Furthermore, Andrews actually teaches away from using a non-water solvent as the majority constituent as "[i]ts cost (as compared to water) will usually argue against using it." See Col. 4, lines 12-14. This teaching away is strong evidence of non-obviousness.

Accordingly, Applicants respectfully request withdrawal of this rejection.

Consequently, Applicants believe that further and favorable action in the form of a Notice of Allowance Issue is next in order, and such action is earnestly solicited.

Should the Examiner have any questions or comments regarding this amendment or the application in general, he is invited to call the undersigned at (404) 954-5035.

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No fees are believed to be due with respect to this Preliminary Amendment and Declaration under 37 C.F.R. § 1.132; however, the Commissioner is hereby authorized to charge any fees that may be required, or credit any overpayment, to Deposit Account No. 13-2725.

Respectfully submitted,

1/10/02

Date

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Exhibit A: Marked-up Claims

18. (Once Amended) An antimicrobial composition [comprising] consisting essentially of:
an antimicrobial component consisting essentially of heptanoic acid, and
a carrier medium.
19. (Once Amended) A method for controlling mastitis in milk producing animals, the
method comprising: applying an antimicrobial composition to a teat of an animal wherein
the [antimicrobial] antimicrobial composition comprises in the range of 0.01 to 5 wt. % of
a C6-C12 fatty acid and a carrier medium including a freezing point depressant
component, wherein the freezing point depressant component comprises greater than 60
wt. % of the composition.
21. (Once Amended) The method of claim 20, wherein the environmental temperatures [of]
are below 30°F.
22. (Once Amended) The method of claim 20, wherein the environmental temperatures [of]
are below 20°F.
23. (Once Amended) The method of claim 20, wherein the environmental temperatures [of]
are below 10°F.